

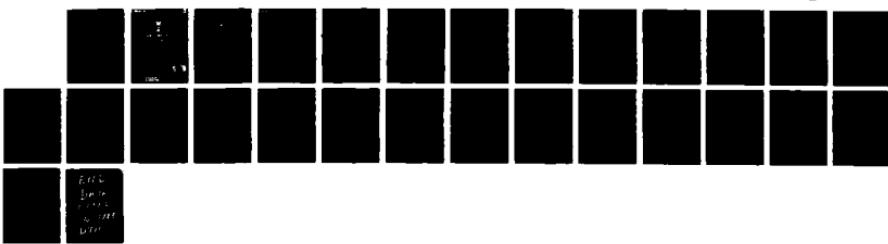
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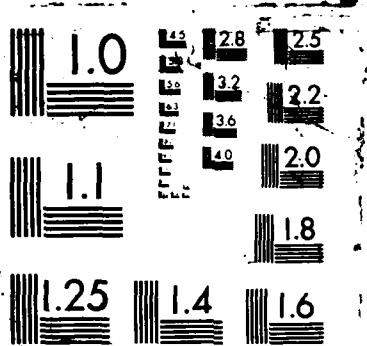
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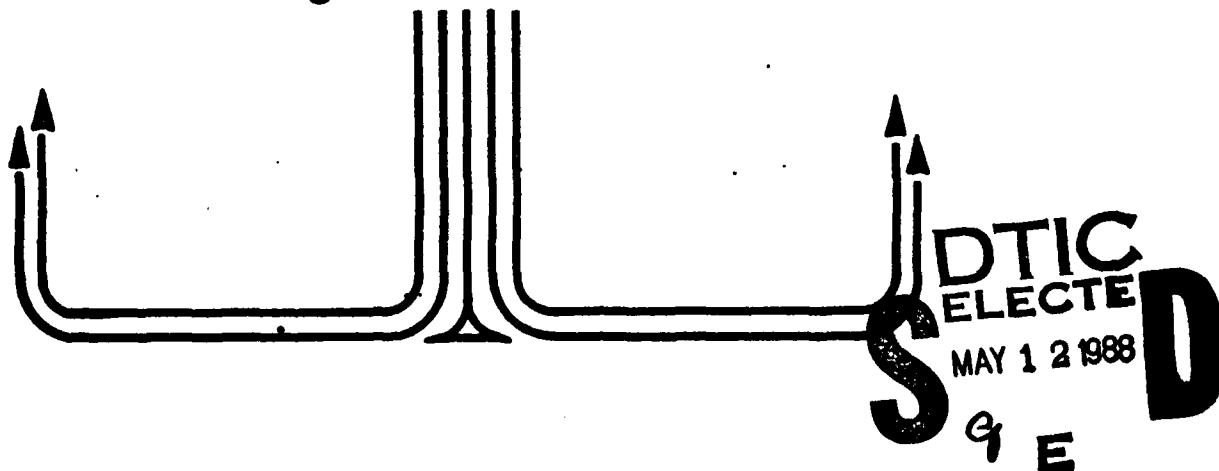


STUDENT REPORT

THE ROLE AND RESPONSIBILITY OF
THE USING COMMAND WITHIN THE
SYSTEMS PROGRAM OFFICE

Major James A. Stevens 88-2480

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REPORT NUMBER 88-2480

TITLE THE ROLE AND RESPONSIBILITY OF THE USING COMMAND
WITHIN THE SYSTEMS PROGRAM OFFICE

AUTHOR(S) Major James A. Stevens, USAF

FACULTY ADVISOR Major Michael A. White, ACSC/EDM

SPONSOR Major Michael A. White, ACSC/EDM

Submitted to the faculty in partial fulfillment of
requirements for graduation.

**AIR COMMAND AND STAFF COLLEGE
AIR UNIVERSITY
MAXWELL AFB, AL 36112-5542**

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| <p>This report discusses the roles and responsibilities of the using command's Systems Office within the Systems Program Office (SPO). These roles and responsibilities and necessity of the systems office are given from the using command's, SPO's, and systems office's point of view. The most important responsibilities are discussed along with areas that cause reductions in the systems office efficiency. Recommendations are given to help increase the systems office's efficiency and effectiveness.</p> | | | | | |
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PREFACE

This project was undertaken to give needed information on the usefulness of the using command's Systems Office (SO) and how these offices interface with their headquarters and Systems Program Offices (SPO). During the research portion of this project it was discovered that no research studies or academic materials were available. As a result, most of the data used in this research comes from interviews of key players within the using command, SOs, and SPOs.

This report discusses the roles and responsibilities of the using command's Systems Office within the Systems Program Office during the acquisition of a weapons system. These roles, responsibilities, and necessity of the SO are given from the using command's, SPO's, and the SO's point of view. The most important responsibilities of the SOs are discussed along with areas that cause reductions in the SO's efficiency. Recommendations are given to help increase the SO's effectiveness.

The help given by those officers within the various offices at the using commands, SPOs, and systems offices was greatly appreciated. Without their inputs this project would have been impossible. It is planned that this paper will be reading material as part of the Systems Acquisition Curriculum at Air Command and Staff College for the seminar "The User and Systems Acquisition."

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ABOUT THE AUTHOR

Major James A. Stevens was born on 13 January 1951 in San Diego, California. He graduated from Sweetwater High School in National City, California, in 1969 and attended the Georgia Institute of Technology from which he received the degree of Bachelor of Science in Industrial Management in June 1975. Upon graduation, he received a commission in the USAF through the ROTC program. He completed navigator training and received his wings in November 1976. He was assigned to Nellis AFB, Nevada, where he upgraded in the F-111A fighter aircraft. In June of 1977 he was assigned to RAF Upper Heyford, England, where he served as an F-111E Weapons System Officer (WSO) and an instructor WSO in the 77th Tactical Fighter Squadron and the Consolidated Training Unit. He attended Squadron Officer School from July to September 1980 where he was a distinguished graduate. In October of 1980 he was assigned to Cannon AFB, New Mexico, where he served as an instructor WSO in the F-111D and wing executive officer until entering the School of Systems and Logistics, Air Force Institute of Technology, in May 1983. In September 1984 he received a Master of Science Degree in Contracting and Manufacturing from AFIT, and also an MBA from Eastern New Mexico University. In October 1984 he was assigned to the F-15 Systems Program Office, Wright-Patterson AFB, Ohio, where he served as the F-15E Dual Role Fighter manufacturing manager until entering Air Command and Staff College in July 1987. He is married to the former Dee J. Hudson. They have four children; Chad, Dea, Joel, and Renee.

TABLE OF CONTENTS

| | |
|-------------------------------------------------|-----|
| Preface..... | iii |
| About the Author..... | iv |
| Executive Summary..... | vi |
| | |
| INTRODUCTION..... | 1 |
| | |
| USING COMMAND..... | 2 |
| Requirements Determination..... | 2 |
| Source Selection..... | 3 |
| Design Reviews..... | 3 |
| Other Responsibilities..... | 3 |
| | |
| FORMAL DOCUMENTATION..... | 4 |
| Regulations..... | 4 |
| Memorandum of Agreement..... | 5 |
| | |
| USING COMMAND'S VIEW OF THE SYSTEMS OFFICE..... | 6 |
| Needs Determination..... | 6 |
| Design Reviews..... | 6 |
| Configuration Control Board..... | 7 |
| SPO Access..... | 7 |
| | |
| SYSTEMS OFFICE LIAISON OFFICER'S VIEWPOINT..... | 8 |
| SON/SORD Process..... | 8 |
| Source Selection..... | 8 |
| Design Reviews..... | 9 |
| CCB..... | 9 |
| PMRT..... | 10 |
| LO/SPD Relationship..... | 10 |
| LOs Biggest Hindrance..... | 11 |
| | |
| SPO'S PERSPECTIVE OF LIAISON OFFICERS..... | 11 |
| Projects..... | 12 |
| Configuration Management..... | 12 |
| Logistics..... | 12 |
| | |
| SUMMARY..... | 13 |
| | |
| ANALYSIS AND RECOMMENDATIONS..... | 14 |
| Memorandum of Agreements..... | 14 |
| Communication Breakdown..... | 14 |
| Formal Training..... | 15 |
| | |
| CONCLUSION..... | 15 |
| | |
| BIBLIOGRAPHY..... | 17 |

EXECUTIVE SUMMARY

REPORT NUMBER 88-2480

AUTHOR MAJOR JAMES A. STEVENS, USAF

TITLE THE ROLE AND RESPONSIBILITY OF THE USING COMMAND WITHIN
THE SYSTEMS PROGRAM OFFICE

I. Purpose: To show how the using command participates in the systems acquisition process within the Systems Program Office (SPO) to help field weapons systems as quickly as possible that meets the users needs.

II. Objectives: (1) To determine, through a search of the current literature, what research studies and academic materials from AFIT, DSMC, and other sources were available on this topic. None were found. (2) To determine if the using command's Systems Offices (SO) are effectively utilized by their using command headquarters and the SPO. (3) If the SOs are not utilized to the fullest, then what could be done to enhance effectiveness. (4) To determine if the SPOs are focusing greater efforts supporting the user as per AFSCR 550-10, Commander's Policies, "Focus On The User." (5) Finally, this project will be used as an article in a lecture/seminar on "The User and Systems Acquisition," to develop interest in the acquisition process.

III. Discussion of Analysis: Through interviews with using command headquarters, SOs, and SPO personnel it was determined how well each of these three generic organizations agreed on what the SOs should provide their headquarters and SPOs. The SO's roles and responsibilities were discussed to determine if SOs are needed along with areas that could be improved to increase their effectiveness and efficiency if they are a necessity.

IV. Findings: Overall the roles and responsibilities performed by the SOs are of great benefit to their using command headquarters and the SPO, and should definitely continue and/or increase manning where possible. However, there were several weak areas discovered during this research that could be strengthened to help the SOs perform their duties better. These areas are: (1) a lack of working memorandum of agreements (MOA) between the SO and SPO in most cases; (2) a breakdown in communication between the SPO and using command with the SO; (3) and finally, a lack of formal training for new Liaison Officers being assigned to the SO.

1. Memorandum of Agreements: TAC and MAC do not use MOAs or any other type of document to put in writing who is responsible for providing administrative and clerical support, office space, TDY funding, etc., between the using command and SPO. SAC finds MOAs an effective tool to ensure the SPO provides the necessary support.

2. Communication Breakdown: This problem continuously crops up when the SO is bypassed because either the using command staffs or new people in the SPO are ignorant of the SO's function.

3. Formal Training: None of the using commands provide any type of indoctrination for new liaison officers. These officers usually come from the field with little or no knowledge concerning their headquarters staff organization and functions nor the systems acquisition process. The typical liaison officer takes from 6 months to a year to become productive.

V. Recommendations: (1) Those commands not presently utilizing MOAs should consider using such a document to provide leverage for the SO in the event the SPO backs down from verbal commitments. The SAC MOA with the simulator SPO provides a good example to follow. (2) To help facilitate an improvement in communications, the SO should develop a teaching guide or orientation briefing on the SO's roles and responsibilities for new personnel in the SPO, at the headquarters staff, and for new liaison officers. This could show how the SOs provide help and what the SPO and using command should do when the SO is bypassed in the communication chain. (3) A TDY to the appropriate headquarters staff agency for the new liaison officer prior to arriving at the SO would greatly help the transition from the field to the acquisition business. In addition, the SOs should provide formal training (over and above the newcomers orientation briefings) on how a SPO works and how the SO can influence and guide the SPO during the acquisition process. The overall goal of these recommendations is to reduce the time it takes to produce an effective liaison officer in a systems office. This research project is not the definitive work in the area of SPO, SO, and using command interface, but an initial look into this important working relationship. Greater efficiency is required in this time of reductions in budgets and personnel and the above recommendations could provide those first steps towards improvements.

THE ROLE AND RESPONSIBILITY OF THE USING COMMAND WITHIN THE SYSTEMS PROGRAM OFFICE

INTRODUCTION

In procuring weapons systems the using command (TAC, MAC, SAC) develops the need and the implementing command (AFSC) acquires a weapon system through its various Systems Program Offices (SPO). The using command and the SPO are two distinct entities in two different commands with decidedly different ideas of what is needed to satisfy this operational need. The using commands have established Systems Offices (SO) employing Liaison Officers (LO) to help ensure the implementing command is procuring a system that will satisfy the using command's identified requirements. This paper will look at the role and responsibility of the using command throughout the systems acquisition process. This will be done by emphasizing the SO's and the LO's relationship between their headquarters and the SPO. First, this paper will discuss what, if any, regulations, directives, operating instructions, and memorandum of agreements are used between the using command, SOs, and SPOs to facilitate the crossflow of information. Second, from the SO's perspective, their roles and responsibilities to both their headquarters and the SPO during the acquisition process will be discussed. Next, a discussion on how the SPO perceives the SO's role within the program office and the necessity of the SO will be presented. Finally, the author will also discuss areas that could be improved and make recommendations to enhance the effectiveness of the using command's Systems Offices (TACSO, MACSO, SACSO).

The purpose of this paper is to help a potential participant in the acquisition process understand the relationship the LO and the SO has between the using command and the implementing command; what the LO does, how to best utilize the LO's expertise, and what areas could be improved to make the LO more efficient.

Most of the information presented in this paper was obtained through personal interviews of SPO, SO, and using command personnel, in addition to the author's personal experience working with LOs for 3 years while assigned to the F-15 SPO. Now let's look at the using command's role in the acquisition process.

USING COMMAND

While the using commands have very different missions and interests, the role each plays in the acquisition process looking after their interests are essentially the same. So, the following discussion on the user/SPO relationship is largely true for all major commands.

Requirements Determination

Each major command usually has an organization responsible for all requirement matters, ensuring whatever threat or operational shortfall which has been identified are ultimately satisfied. This organization has numerous responsibilities. One is to analyze mission requirements vice current capabilities and then prepare, coordinate, and submit the Statement of Operational Need (SON) for their command (6:I-1). The SON is a formal document used to identify an operational deficiency and state the need for a new or improved capability for the Air Force (2:--). For example, if your swords are 2 feet long and the enemy has 3 foot swords, then a valid requirement exists for something that will take care of his superior sword. That does not necessarily mean you need a 4 foot sword. If a contractor can build a 2.5 foot sword made of a new super sharp steel that will pierce his armor, then you have got an option to think about. Maybe a new sword is not needed. Perhaps a modification to the existing sword with a longer handle will meet the threat (21:1). Obviously, many options exists that must be analyzed before a SON is approved.

This organization is also OPR for the Systems Operational Requirements Document (SORD) which supplements the SON and details operational requirements (such as weight, performance, cockpit configuration, etc.) and how each system will be used in an operational environment. Together the SON, SORD and any additional documentation provide the guidance and framework for the acquisition process (6:III-2). The using command is the primary player in developing and validating the need for a new system. However, this is just the beginning of the user's roles and responsibilities throughout the acquisition process.

The using command has many responsibilities throughout the acquisition process. However it is not the intent of this paper to go into all these responsibilities, but to give a flavor of what they do in several important areas of the systems acquisition. The using command is deeply involved with the implementing command, Air Force Systems Command (AFSC), and their field organizations in developing and procuring a complete weapon system which the validated using command's need (6:I-17). Some of the areas where the using command provides vital inputs to the SPO are the source selection process, design reviews, configuration control, logistics management, and program management responsibility transfer.

Source Selection

The using command is an important player in the source selection process. This process is where a contractor is evaluated and selected for work on a proposed system design. The users are generally members of the Source Selection Evaluation Board (SSEB) which determines if program requirements expressed in the request for proposal are satisfied by the contractors. They then make recommendations to the Source Selection Advisory Council who analyzes the results of the SSEB findings and presents them to the Source Selection Authority for a final decision (6:II-9). After the contract is awarded the using command tracks progress of the weapons system by attending several major design reviews.

Design Reviews

The using command's function at a weapons system Preliminary or Critical Design Reviews (PDR/CDR) is to attend these meetings and ensure the contractor and the SPO are making the proper interpretation of each requirement. The SPO has the primary responsibility for conducting these reviews, while the using command acts as a "very interested" observer. However, when a trade-off/compromise of a requirement is necessary the using command will make their inputs either accepting or rejecting the trade-off (16:--). As a weapon system moves into Full Scale Development, the using command's focus moves to the day-to-day activities involved in designing, testing, and fielding a complete system, including the necessary support equipment and training systems.

Other Responsibilities

The using command is also a key player in the configuration management, integrated logistics system (ILS), and training requirements of the weapons system. Their primary responsibility is to ensure the identified requirements for spares, support equipment, and trainers are being met, and when something changes which may necessitate a trade-off action the using command should be consulted before any proposed action is taken by the SPO. During the deployment phase systems management responsibility changes hands from the SPO to the Air Force Logistics Command (AFLC). This change is known as Program Management Responsibility Transfer (PMRT). During PMRT the using command must keep its finger on the pulse of the program to help facilitate a smooth transition to the supporting command. This is done by ensuring all configuration changes are identified and there are no disconnects on who has responsibility for completing any unfinished configuration changes (i.e., AFLC, the contractor, or the using command itself) (18:--).

Now that we have taken a look at some of the using command's responsibilities lets examine some of the formal

documentation that helps define the relationship between the using command and the Systems Office. In addition, the SO's roles and responsibilities in helping to keep the using command informed on the status of the program will be discussed.

FORMAL DOCUMENTATION

The using commands have a number of regulations and guidelines governing their roles, responsibilities, and relationships with the SPO. For example, the using command and the SPO are usually not co-located. As a result, the using commands have established resident systems offices (i.e., TACSO, SACSOS, and MACSO) at the various product divisions and SPOs to better fulfill its responsibilities. To facilitate the using command's integration into the SPO the using commands use regulations and MOAs detailing responsibilities of these systems offices.

Regulations

Each using command has a regulation (TACR 20-5, MACR 23-19, and SACSOP 1 to AFR 800-2) outlining the SO's mission, who the office reports to, and their responsibilities to the using command headquarters and SPO. The mission of the SO is to function as the eyes and ears of the using command in all matters relating to the development, acquisition, or modification of a weapon system. The SO is usually a voting member of the SPO's Configuration Control Board (CCB) (3:1). Also, the SOs report directly to their HQs and receive operational authority from the Director of Operational Requirements or Plans (5:1).

Each using command SO's responsibilities are essentially the same. They include, but are not limited to the following:

- a. Provide operational guidance as contained in approved operational plans. [prepared by the using command]
- b. Maintain current knowledge of all HQ developed actions/plans influencing systems acquisition/implementation/supportability to assist the SPO in ensuring that no incompatibilities exist between these documents and the program management plan (PMP).
- c. Notify HQs of any program changes or deviations which could impact the command's functional responsibilities.
- d. Provide HQs representation on all boards and committees pertaining to systems development, acquisition, or modification.

e. Monitor and report on the adequacy, availability, compatibility, and safety-of-flight orientation of technical data and operational procedures.

f. Obtain program documentation coordination when required.

g. Provide reports [to the using command] summarizing activities, visits, project or program status, problems, and recommended actions.

h. Perform travel, as necessary, to ensure that assigned responsibilities are performed.

(3:2; 5:2)

Simply stated, the objective of the SO is to ensure the using command headquarters is kept apprised of the day-to-day operations within the SPO concerning systems development. The only other type of formal documentation between the using command headquarters, SO, and SPO is a Memorandum of Agreement or Letter of Agreement. However, SAC is the only command that uses this document.

Memorandum of Agreement (MOA)

In SAC Supplement 1 to AFR 800-2 it states, "the responsibility and authority of the SACSO or representative to the SPO will be defined in a Letter of Agreement (LOA) between the respective SPO, SAC OPR, and the SAC director responsible for the resident SACSO or representative." Therefore, MOAs and LOAs are used between SAC, SACSO, and the SPO. The main thrust of these agreements are to provide SAC's purpose, objective, principles of operation of the SACSO, and specific relationships between the SPO, SACSO, and HQSAC. Neither MAC nor TAC are required to use MOAs or LOAs by their respective regulations. As a result, MOAs are not used to further detail HQs or SO responsibilities within the SPO nor what the SPO's responsibilities are to the users.

No other formal documentation is used to guide and direct a new person coming from the field into a SO. Only TAC provides a list of acquisition and logistics courses required within the first year of assignment (5:2). In addition, only the TACSO provides some kind of initial inbrief/indoctrination training and formal course scheduling. Furthermore, TAC, SAC, nor MAC do not have any type of formal training, at their headquarters, for newly assigned liaison officers on headquarter's staff point of contacts, what are the program requirements and priorities, or the systems acquisition process. However, liaison officers usually go TDY to the using command's headquarters at least semi-annually to make new contacts, renew old ones, receive a general reorientation, and guidance on program activities (9:--). It is obvious the SOs can provide a valuable service to their headquarters, but is this in fact the

case. Let's look at how the using command view the roles and responsibilities of the SOs.

USING COMMAND'S VIEW OF THE SYSTEMS OFFICE

In general the using commands see the SOs as fulfilling a most important role--the eyes and ears of the using command within the SPO. This day-to-day contact with SPO personnel provides the SOs with unique insight on how the SPO conducts business, which is valuable to the using command. However, the using command does not consider the SOs as their "spy." They are instead team players trying to get a weapons system to the field which works as advertised (16:--). The using commands see the SO as an invaluable extension of their interests in several areas; such as need determination, design reviews, CCB, and SPO access.

Needs Determination

The SOs can play an important role in the SON/SORD development process. Even though it is the using command who writes these documents, the SOs can and do provide an influencing force in determining requirements. This is based on information gained by the SOs on new technology, through interfacing with the various Air Force laboratories. Evaluation of state of the art capabilities are passed to the using command for their use, if desired, in developing the SON and SORD (12:--).

The using command expects SOs to provide the SPO with the user's interpretation of the SON and explain the using command's intent. The SO's user experience is valuable to the SPO from the using command's point of view because the SO can tell the SPO how the operator is going to use the system (18:--). Besides providing inputs for the requirements documents let's look at a few other functions the using command headquarters expects the SOs to fulfill.

Design Reviews

Design Reviews are very important to the SO in terms of the visibility into the condition/status of the program. These reviews provide the using command with an indepth look at the contractor's design of the system. The using command sees the SO's responsibilities at these major reviews as one of advisor and augmentee to the using command. The SOs are not to lead any meetings (that's the SPO's job), but rather to ensure proper interpretation of the user's requirements. If a requirement turns out to be too expensive or beyond the current state-of-the-art capability of the contractor, then the using command will make inputs into any trade-off or compromise decision. It is the SO's job to ensure the SPO understands the users position in these trade-off decisions. The SO's

responsibility is to do the same thing the using command would do if unable to attend the review, and then coordinate with their HQs before any action is taken (16:--). After the design review any configuration changes must go through a review process called the Configuration Control Board (CCB). The SO plays a vital role for the using command as a voting member on the CCB.

Configuration Control Board

The configuration of a weapons system is never "cast in concrete." The more complex the system the more it seems to change, even during production. The SPO has the responsibility for configuration management. To maintain control of this dynamic environment, the SPO usually holds weekly CCB meetings where changes are briefed and approved, disapproved, or modified. The using command, represented by the SO, considers themselves a principle player on the CCB. However, the using command is never at a CCB meeting, but has delegated attendance to the SOs. The using command expects the SOs to provide the user's coordinated position and to work the changes proposed by the SPO or contractor in light of previous validated requirements. This is done by keeping the using command in the information/coordination loop and making no decision for the headquarters without prior coordination/approval before the change goes to the CCB (18:--).

Once the change is presented, the using command can either concur or nonconcur. If any differences have not been worked out prior to going to the CCB for a final decision the using command, through the SO, can nonconcur. However, the program manager can override what the using command wants due to cost, schedule, or performance impact. While the SO is a voting member of the CCB, the greatest usefulness for the using command is its day-to-day access to SPO personnel.

SPO Access

The biggest advantage the SO provides to the using command is its day-to-day working relationship with the SPO director, the program managers, and the SPO staff. This relationship cultivates the feelings that the using command and SPO are on the same team. The SO can act as a conduit between the SPO and using command. The SO's function in the information flow process is to let their headquarters know how the SPO reacts to a using command initiative. The SOs can help "smooth the way" by making recommendations, based on their personal knowledge of SPO players, on how the using command can sell its initiative to the SPO (16:--). In addition, the SOs attend numerous meetings (other than formal design reviews) at the SPO's and contractor's facilities representing the using command point of view. The SOs are expected to pass to their headquarters any information received at these meetings.

While the using command usually passes information through the SOs, it can go directly to the SPO, and vice versa, without first talking to the SOs. This is done frequently on time critical items or when the SOs are not available. When this happens the using command should go back to the SOs and fill them in on what has happened. This ensures the communication channels are open and thus reduce the potential for friction between the user and the SPO (18:--).

In summary, the using commands feel the SOs are performing a most important function. They are the user's "eyes and ears" at the SPO. Without the SOs the using command would have to be TDY all the time to the SPO to keep current on "their" programs. The using command obviously appreciates the importance of the SO. But how do the SOs see their roles and responsibilities in the acquisition process?

SYSTEMS OFFICE LIAISON OFFICER'S VIEWPOINT

When examining the roles and responsibilities of the systems office liaison officer (LO) it is important to remember their ultimate objective is to determine if there any disconnects between what the using command expects from the SPO and what the SPO is actually doing. Looking at how the SO's view their roles and responsibilities during the acquisition cycle, this section will discuss the SO's inputs into the SON/SORD process, Source Selection, Design Reviews, CCB, and the PMRT process. Additionally, the SO's perceived relationship with the SPO Director (SPD) and Program Manager (PM) will be examined. Finally, what does the SO see as its biggest problem in doing their job.

SON/SORD Process

During SON/SORD development the LOs can influence this process by providing current information on technology developments to the using command (20:--). While the LO's inputs into the actual writing of the SON or SORD is minimal, his primary role is one of interpreting these documents for the SPO (9:--). The LOs must know and pass on the using command's intent and clearly differentiate between their opinion and their headquarter's position. Indeed the LO can't "shoot from the hip" if he is not sure of the headquarter's position. The LOs must present a fully coordinated position before providing answers to the questions from the SPO if they are to maintain a high level of credibility (20:--). After the SON/SORD are written and proposals are submitted by the contractors, a source selection evaluation board is convened.

Source Selection

The LO's participation during a source selection depends on their work load and if they are released by their systems

office commander (20:--). The LO can act as an evaluator or advisor. However, while the LO can make recommendations concerning the contractor's proposal, the using command headquarters retains final decision authority on what recommendations are passed to the source selection authority. The primary role for the LO, however, is to monitor the source selection and represent the using command headquarters when the headquarters team must leave for some reason (15:--; 19:--). When a contractor has been selected and the program enters full scale development, program design reviews are conducted by the SPO.

Design Reviews

At these types of reviews the SPO is the OPR. They set the agenda and conduct the meetings. The LO's primary role is to fill in for the using command and assist the PM and SPO staff where possible. As deficiencies are identified by the SPO or contractor, the LO is to pass them to the using command headquarters in addition to informing the SPO and contractor (9:--). The most important responsibility the LO has at these reviews is to ensure they and the HQs present the same requirements to the SPO and contractor (19:--). After the final major design review, (CDR), is completed the design of the weapons system is firm. However, facts of life show that configuration changes continue throughout the remainder of the program. The LO coordinates on every change before going to the SPO's configuration control board (CCB).

CCB

As mentioned earlier under this heading for the using command, the LO represents the users as a voting member on the SPO's CCB. The LOs see their primary responsibility is to work with the SPO staff on all changes to ensure previously agreed upon requirements are being met. These changes are coordinated with the using command for their concurrence prior to the change going to the CCB for final approval. The biggest problem the LO has in this process is getting a fully coordinated using command position in a timely manner. Failure to get this agreement could impact the contractor's ability to meet program cost, schedule, or sustainability requirements. The LO must try to push their headquarters for a quick turn around on these changes (9:--).

Not all configuration changes however are SPO or contractor initiated. The using command sometimes initiates a desired capability configuration change. The LO's role here is to work the proposed configuration change between the using command and the SPO (15:--). What usually happens is the user wants more than the SPO can afford (both in time and money). As a result, the LO must work with the SPO to coordinate these changes, if possible; and if it is not possible, go back to their headquarters and explain their options (15:--). Even with

these changes on going, PMRT will take place.

PMRT

The LO's role and responsibility during PMRT ranges from little or no involvement to writing some portion of the PMRT plan. This involvement is dependent on time availability and specific expertise in this area (19:--). Usually the LOs make sure the user is aware of all pending weapon systems configuration changes as hardware is being delivered to the operators in the field. The LOs try to tie up any loose ends ensuring any open tasks (waivers or deviations, etc.) from the contractor are picked up and tracked by the Air Logistic Centers (20:--).

Now that we have touched on some of the specific duties of the LOs, lets look at how the LOs perceive their relationship with the SPO Director and the Program Manager.

LO/SPD Relationship

The SPD is like a squadron commander with the LO being a special assistant. The LO ensures the SPD gets timely information on requirements during daily staff meetings and program reviews. The LO participates in these meetings by providing the user's perspective to the SPD's and PM's staff so they have a clear idea what the user feels is important and why. Also, the LO takes action items from the SPD to resolve problems or disagreements between the SPO and the using command (9:--).

If there is a "disconnect" the LO has several methods available to resolve these issues. The LOs can have a scheduled "users hour" every week with the SPD/PM to air any problems and work mutually acceptable solutions. If the SPD or PM does not want to move on a perceived problem, this problem can be elevated to the appropriate using command directorate or it can be highlighted through the system office's monthly report to the Product Division Commander. This last method is seldom used but available to put a problem on the front burner (20:--). The LO would rather work the problem internally between the SPD and the appropriate level at the using command, acting as a facilitator between these two key players in the acquisition process

The LOs also provide many services to facilitate a good day-to-day working relationship within the SPO. They provide ongoing feedback to the SPD/PM, via trip reports concerning meetings at various contractors (20:--). The LOs usually coordinate on SPO correspondence going to the using command, providing guidance and "helpful hints" on wording, and who to "info" for quicker results. In addition, the LOs work with the SPD/PM in putting together the weapons system's "nice to have" priority list for the yearly budget process (20:--).

The LOs act as trial balloons for the SPD/PM to find out the using command's reaction on new SPO generated initiatives or program changes (15:--). In doing this the LO can keep the SPD/PM informed on the using command's reaction. Keeping everyone in the communication loop is one of the biggest problems facing the LO in doing their job.

LOs Biggest Hindrance

The LO's bread and butter is information and communication. However, when the using command and the SPO are not required to touch base with the LO before talking to each other the stage is set for the LOs being caught with their pants down (9:--). This is one of the biggest problems mentioned by all the LOs contacted. Again it is the typical case of out of sight out of mind. This usually occurs when the using command forgets about the LO due to quick suspenses and goes directly to the SPO for resolution and fail to inform the LO. This could adversely affect the LO's credibility with the SPO--not intentionally (20:--). However some HQs staff organizations do not even know that the system office exists (20:--). This same problem sometimes occurs in the SPO.

It appears the only thing being done to solve this problem is to ensure the systems office is an "info" addressee on all messages between the SPO and using command (9:--). There is no formal educational process by the systems office to inform the SPO what the LOs can do for them except for a briefing presented by the TACSO at newcomers orientation. Usually SPO personnel find this out by word of mouth within the SPO. In addition, there is no initial formal indoctrination by the using command for new LOs, at the HQs, so they can meet the different staffs and establish contacts. However, in the eyes of the using command and the LOs themselves there is no doubt the LOs play a vital role, but what is the perception of the SPO regarding the LO?

SPO'S PERSPECTIVE OF LIAISON OFFICERS

Without exception the PM and the SPO staff regard the role of the SO and LO as very important to the program's success. "They provide extremely valuable inputs on requirements based on their operational experience and provide the right types of people at the using command to get opinions from" (10:--; 11:--; 13:--; 14:--; 17:--; 22:--; 23:--; 24:--). The PM considers individual liaison officers as the providers of "inside information" on what the using command really wants (22:--). These officers can separate the "wheat from the chaff" regarding what is the bottom line requirement (22:--). In addition, the LOs usually represents the only qualified operator, within the SPO, on current weapons systems.

The operational experience the LO brings to the SPO is considered critical and carries great influence with the PM and the staff. The SPO needs someone with user experience to provide a common sense check in this dynamic acquisition environment. Lets now look at some of the specific inputs the LO provides to the PM and the SPO staff.

Projects

The PM see the role of the LO as one of a team player. They expect the LO to be available to answer questions about the SON, SORD, and the operational environment (14:--). Also, they expect the LO to participate in SPO activities so the LO does not have to be educated by an individual project manager everytime the manager comes to the LO with a problem, i.e., stay current on SPO concerns and problems (10:--). The project managers believe the LO "help grease the skids" between the SPO and using command in addressing problems and helping word SPO generated correspondence to the using command (14:--). Finally, because the LO works on a day-to-day basis with the SPO and knows what is required to get the job done, the LO can keep the using command off the SPO's back by explaining the background or rational for actions and decisions. Additionally, the LO acts as a buffer to keep the using command from poking its nose where it does not belong--and trying to tell the SPO how to do its job (22:--). This, in general, is the PM's perception of the LOs function within the SPO. Now lets discuss what services the LOs provide to the SPO.

Configuration Management

As the office within the SPO responsible for managing any changes to the configuration of the weapons system, these managers feel the LO plays an extremely important role in helping get the a change incorporated (17:--). The LO's inputs in the change process are critical and carry a heavy weight in approving or disapproving of changes (13:--). When a change is proposed the LO provides comments and helps coordinate the change with the using command. The LO works any non-concurrence issues with their headquarters to resolution prior to the change going to the CCB. Overall, the LO's opinions are sought out and are considered a valued asset within the SPO.

A lack of sufficient manning can cause the LOs problems in helping review and tracking changes (13:--). If the LO is not available, the SPO will by-pass them and go directly to the using command which leads to communication breakdowns and a drop in LO efficiency.

Logistics

The job of the LOs in relation to the Deputy Program Manager for Logistics (DPML) and more specifically the ILS process is essentially the same as with the PM and

configuration management. The LOs coordinate any change actions to the weapons system with the using command to ensure the operators in the field knows who is responsible for incorporating these changes (the contractor, AFLC, or field) (11:--). The LO also investigates maintenance and support problems, provides interpretation of requirements, assists in writing maintenance plans, and provides an operational and maintenance perspective (24:--). Overall, the LOs are responsible to have a management oversight function in all the areas of ILS and not get involved with the multitude of paper work generated at the SPO (11:--). Because so much work is involved in planning for and fielding maintenance and support equipment most DPMLs would like to have even greater involvement by the LO to help the SPO provide a supportable weapons system. According to the SPO, General Randolph, Commander, AFSC, has charged the SPO to support the user in providing weapons systems with adequate support equipment (24:--). Therefore, it is not surprising the "loggies" could use more help to accomplish this task. The Liaison Officer provides the much needed practical expertise to help the SPO avoid re-inventing the support wheel.

SUMMARY

At the SPO, the Systems Office and the Liaison Officer function as a user, an expert, a diplomat, a confidant, a communicator, and an investigator to name a few. The LO is usually a major or above and the logistics LO a technical sergeant or above. They are people who are viewed as the experts by the SPOs as well as the using command. They act as arbitrators between the SPO and the using command to facilitate a mutually acceptable resolution to the numerous problems that can and do occur during the acquisition of a weapons system. The LOs are also sounding boards for new SPO initiatives giving valuable inputs and recommendations. They communicate requirements from the using command and make suggestions to the SPO on how to sell a new initiative. In addition, the LO is constantly working and investigating problems, and changes to the configuration of the weapons system.

The SO and LO does all of these jobs while not necessarily being in the formal communication chain between the SPO and the using command headquarters. The SPO and using command do not have to go through the systems office or the individual LO when communicating with each other. However, it is in the using command's and SPO's best interest to keep the systems office and the LO in the loop on all actions and decisions affecting the program.

The Liaison Officers are a valuable asset and a necessary part in the acquisition process. While the LOs are considered the "fly on the wall" for the using command and the LOs themselves admit they are the using command's "spy", they are

first and foremost a team player in the acquisition process. Never-the-less, there are areas that could be improved to help the LO be more efficient. These improvements will be discussed as recommendations to improve the SPO, Systems Office, and Using Command interface.

ANALYSIS AND RECOMMENDATIONS

Overall the roles and responsibilities performed by the Systems Office LO are of great benefit to their using command and the SPO, and should definitely continue and/or increase where possible. However, there were several weak areas discovered during this research that could be strengthened to help the LOs perform their duties better. These areas are: (1) a lack of working MOAs between the SO and SPO in most cases; (2) a breakdown in communication between the SPO and using command with the SO; (3) and finally, a lack of formal training for new LOs.

Memorandum of Agreements

MOAs provide the principles of operation of the using command's systems office within a SPO. In addition, the MOA can detail what specific courses of action the using command and the SPO will be responsible for to facilitate an effective work environment for the LO (7:1; 8:1). Only SAC has MOAs with the various SPOs they work with. The SAC systems office find MOAs an effective tool to ensure the SPO provides administrative and logistical support (19:--). TAC and MAC do not use MOAs or any other type of document to put in writing who is responsible for providing administrative and clerical support, office space, TDY funding, etc., between the using command and SPO.

RECOMMENDATION: Those using commands not presently utilizing MOAs consider using such a document to ensure all parties concerned know and agree on who is responsible for what support. The SAC MOA with the simulator SPO provides a good example to follow.

Communication Breakdown

As mentioned earlier, communication and information are the bread and butter of the systems office. However, it was consistently mentioned as a problem for the LO. This problem continuously crops up when the SO is bypassed because either the using command staffs or new people in the SPOs are ignorant of the SO's function.

RECOMMENDATION: To help facilitate an improvement in communication the SO should develop a teaching guide or orientation briefing on the SO's role and responsibilities for new personnel in the SPO, at the headquarters staff, and for

new liaison officers to get them all up to speed quicker to help avoid information falling through the crack.

Formal Training

The last problem noted during this research was the lack of training or indoctrination for new liaison officers. None of the using commands provide any type of indoctrination for new LOs, who usually are coming from the field and have very little, if any, knowledge of the headquarters staff organizations nor of the systems acquisition process. A typical LO gets a baptism by fire by arriving at the systems office directly from an operational unit, and then being assigned to a SPO with very little training on what he is supposed to do or how the system operates.

RECOMMENDATION: A TDY to the Requirements Directorate to sit in their hip pocket prior to going to the systems office would greatly help the transition from the field to the acquisition business. In addition to the using command headquarters not providing indoctrination for new LOs, the SOs have no formal orientation or training except to rely on the ASD newcomer orientation briefings (vague at best) and the System 100, Introduction to Acquisition, course which usually is scheduled within the first 6 to 12 months after arriving on station. The usual time it takes for a new liaison officer to become productive is anywhere from 4 to 8 months. This time could be cut measurably if both the using command and systems office provided formal training/indoctrination prior to the liaison officer being assigned to a specific program out of the systems office, and the Systems 100 course taken within the first three months after arriving on station.

CONCLUSION

We, as future Air Force leaders, will have many occasions to provide inputs into the development and/or use of weapons systems. We are users of Air Force resources. As a result, the better informed we are on how the acquisition system works the more likely our inputs will favorably impact weapons systems to meet stated requirements.

This paper concentrated on the using command's perspective of systems acquisition by focusing on the role and responsibilities of a using command's Systems Office. The Systems Office's Liaison Officers are the "eyes and ears" of the using command within the program offices during the lengthy (10 years or more) systems acquisition process. The Liaison Officer provides valued information to their headquarters concerning status of the procurement. In addition, the LOs provide the program office with invaluable user insights and expertise on how the weapons system will be used in the field.

Without question the SOs are regarded as a necessary and very important part of the systems acquisition process by the using command and the SPO. Even though LOs work for their headquarters, the individuals interviewed within the program offices feel they could not do a totally complete and effective job without inputs from the LOs. The acquisition system benefits by having the using command represented within the program offices. This benefit comes in the form of increased communication between the buying activity and the using command. However, several weaknesses were brought to light.

Even though a few weak areas were discovered, such as little or no use of formal internal documents (MOAs), communication breakdowns, and lack of formal training, the SO organization is strong and functioning well. The suggested recommendations would help increase the SO's efficiency and reduce the time it takes to get the individual LO up to speed on a program. Overall, the using command is an important part of bringing a weapon system to fruition. Their job is made easier by the individual Liaison Officers within the using command's System Office.

BIBLIOGRAPHY

Official Documents

1. Department of the Air Force. AFR 55-24, System Operational Concept. Headquarters US Air Force, Washington DC, 28 February 1986.
2. Department of the Air Force. AFR 57-1, Operational Needs. Headquarters US Air Force, Washington DC, 28 May 1985.
3. Military Airlift Command. MACR 23-19, Mission of Detachment 4, HQ MAC. Scott Air Force Base, Illinois, 21 November 1986.
4. Strategic Air Command. SAC Supplement 1 to AFR 800-2, Acquisition Program Management. Offutt Air Force Base, Nebraska, 20 July 1983.
5. Tactical Air Command. TACR 20-5, TAC Resident Offices. Langley Air Force Base, Virginia, 2 August 1985.
6. Tactical Air Command. DCS Requirements, Introduction to the TAF Requirements Process. Langley Air Force Base, Virginia, September 1986.

Unpublished Materials

7. Letter of Agreement, Director of Aeronautical Requirements (SAC), SAC Systems Office (SACSO), and Deputy for Simulators (ASD), 1 October 1986.
8. Memorandum of Agreement, Headquarters Strategic Air Command and Deputy for Strategic Systems, 14 February 1986.

Other Sources

9. Beyer, Merrill, Maj, USAF. Tactical Air Command Liaison Officer, F-15 Program Office, Wright-Patterson Air Force Base, Ohio. Telecon, 5 November 1987.
10. Boyer, Rick, Assistant Division Chief F-15 Projects, Wright-Patterson Air Force Base, Ohio. Telecon, 5 November 1987.

CONTINUED

11. Carpenter, Michael, Capt., USAF. Chief, F-15 Integrated Logistics Systems Branch, Wright-Patterson Air Force Base, Ohio. Telecon, 5 November 1987.
12. Crowley, Thomas, Lt Col, USAF. Chief, C-17 Division, MAC/XPQC, Scott Air Force Base, Illinois. Telecon, 18 November 1987.
13. Dollar, Lawrence, Director, Configuration and Data, C-17 Program, Wright-Patterson Air Force Base, Ohio. Telecon, 19 November 1987.
14. Heil, Michael, Maj, USAF. Chief, C-17 Structures Branch, Wright-Patterson Air Force Base, Ohio. Telecon, 17 November 1987.
15. Kowalski, Colin, Lt Col, USAF. Strategic Air Command Systems Office, Director of Operations, B-1B Program Office, Wright-Patterson Air Force Base, Ohio. Telecon, 18 November 1987.
16. Lay, William, Lt Col, USAF. F-15 Division Chief, TAC/DRF, Langley Air Force Base, Virginia. Telecon, 19 November 1987.
17. Rinker, Bruce, Lt Col, USAF. Deputy Director Configuration Management, B-1B Program Office, Wright-Patterson Air Force Base, Ohio. Telecon, 19 November 1987.
18. Sewart, Jay, Maj, USAF. B-1B Systems Acquisition Manager, SAC/XPHB, Offutt Air Force Base, Omaha, Nebraska. Telecon, 10 November 1987.
19. Shoemaker, Harold, Lt Col, USAF. Commander, Strategic Air Command Systems Office, Wright-Patterson Air Force Base, Ohio. Telecon, 9 November 1987.
20. Siracuse, George, Lt Col, USAF. Commander, Military Airlift Command Systems Office, Wright-Patterson Air Force Base, Ohio. Telecon, 19 November 1987.
21. Tactical Air Command System Office newcomers orientation Briefing, Wright-Patterson AFB, Ohio. Date unknowned, author unknowned.
22. Unitt, Peter, Lt Col, USAF. Chief of Projects, F-15 Program Office, Wright-Patterson Air Force Base, Ohio. Telecon, 3 November 1987.

CONTINUED

23. Wright, Connie, Chief, Configuration Branch, F-15 Program Office, Wright-Patterson Air Force Base, Ohio. Telecon, 10 November 1987.
24. Zimmerman, Eric, LT Col, USAF. Deputy Director, Acquisition Logistics Division, Wright-Patterson Air Force Base, Ohio. Telecon, 20 November 1987.

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